**SOFTWARE** 

## **ELICIT**

27.01.2025

In addition to some programming questions, I have prompted several LLMs for a summary of my longstanding research question "vitamin D supplementation in the newborn period and later allergy". Here is the elicit response:

Research on vitamin D supplementation in infancy and its relationship to later allergy development has yielded mixed results. Some studies suggest that higher vitamin D intake during the first year of life may increase the risk of atopic conditions later in childhood (Bäck et al., 2009; Hyppönen et al., 2004). These findings are supported by animal studies and epidemiological surveys linking early vitamin D supplementation to allergy development (Wjst, 2006). However, a randomized controlled trial found that high-dose vitamin D supplementation did not prevent allergic sensitization or diseases in infants compared to standard dosage, except for an increased risk of milk allergy in the high-dose group (Rosendahl et al., 2019). Interestingly, this study also observed that infants with high cord blood vitamin D levels had a higher risk of food allergen sensitization. These conflicting results highlight the complex relationship between vitamin D and allergy development, suggesting that both insufficient and excessive vitamin D levels may potentially influence allergic outcomes.

The limitation introduced by "however" is wrong – the whole story is not really conflicting if you read my earlier paper on a paradoxical reaction. I have been a reviewer of the Rosendahl paper and asked them to change their misleading spin. It is basically a triple blind study (the authors believed the opposite fact eg that vitamin D supplementation prevents while it induces allergy). Unfortunately, as Rosendahl et al. did not respond to my complaint, we can now clearly see how the bias of the authors is being injected into the LLM.

I dont know why there is still the discussion of any genuine understanding of LLMs as there is none, see <u>Binz et al.</u>

even though LLMs often achieve state-of-the-art performance on existing benchmarks, it remains debated whether this reflects genuine understanding, or whether they are merely acting like stochastic parrots [...] When deciding whether to use an LLM, it is important to recognize that LLMs are simply models of word form distributions extracted from text—not models of the information that people might get from reading that text

Anyway, the workflow suggested by <u>inkenai</u> – putting these PDFs now into <u>NotebookML</u> for further analysis – is excellent.

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